

# WBWL Facility ID No.: 40824

## Minor Modification for Change of Antenna Type

### July 2014

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This application is one of three applications of a coordinated contingent group of minor change applications involving stations WCIB, Falmouth, MA, Facility ID 2683, WBWL, Lynn, MA, Facility ID 40824, and WWBB, Providence, RI, Facility ID 54568.

By this application, WBWL seeks to modify its current facility to use a non-directional antenna system. No change in facility height or location is being made, and WBWL will remain located upon antenna structure registration number 1004488.

The present WWBB Class B facility is short spaced with WBWL Class A pursuant to Section 73.213(a), a short spacing which has been continuous since prior to November 1964. This coordinated contingent group of minor change applications will end that short spacing as WWBB is being reclassified as Class A.

Attached as **Figure 1** is a spacing study, conducted at the WBWL antenna location<sup>1</sup> which includes all known facilities, applications, and allocations; as well as the planned modified facilities of WCIB and WWBB. This Figure confirms that the WBWL antenna location will be fully spaced in accordance with Section 73.207 with all known facilities, applications and allocations with the exception of the contingent modification applications of WWBB and WCIB; to which compliance with Section 73.215 is demonstrated.

To prevent prohibited contour overlap the modified WWBB and WCIB will each operate utilizing directional antennas and WCIB will also operate with reduced power.

With respect to WWBB, Figure 2 is a map of the pertinent interfering and protected contours, demonstrating that no prohibited contour overlap will exist. The distance to WWBB will be 69.51 km.

With respect to WCIB, Figure 3 is a map of the pertinent interfering and protected contours, demonstrating that no prohibited contour overlap will exist. The distance to WCIB is and will remain 96.08 km.

The WBWL facilities were evaluated in terms of potential radio frequency radiation exposure in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation." A two element, one-half wavelength spaced Shively 6810 series antenna mounted on a mast atop the "One Financial" building in Boston is utilized.

The roof area is locked and access is for authorized persons only. There are two masts on the building, a western and an eastern, spaced approximately 30 feet apart. WERS, Channel 205B1 operates on the western mast with an ERP 4.0 kW, with a center of radiation 15.5 meters above the roof. WHRB,

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<sup>1</sup> 42-21-08.2 N 71-03-24.6 W (NAD 27), Antenna Structure Registration 1004488.

Channel 237A operates on the eastern mast with an ERP of 1.70 kilowatts directional with a center of radiation 14.5 meters above the roof. Both WERS and WHRB utilize Shively four element one-half wavelength spaced antennas.

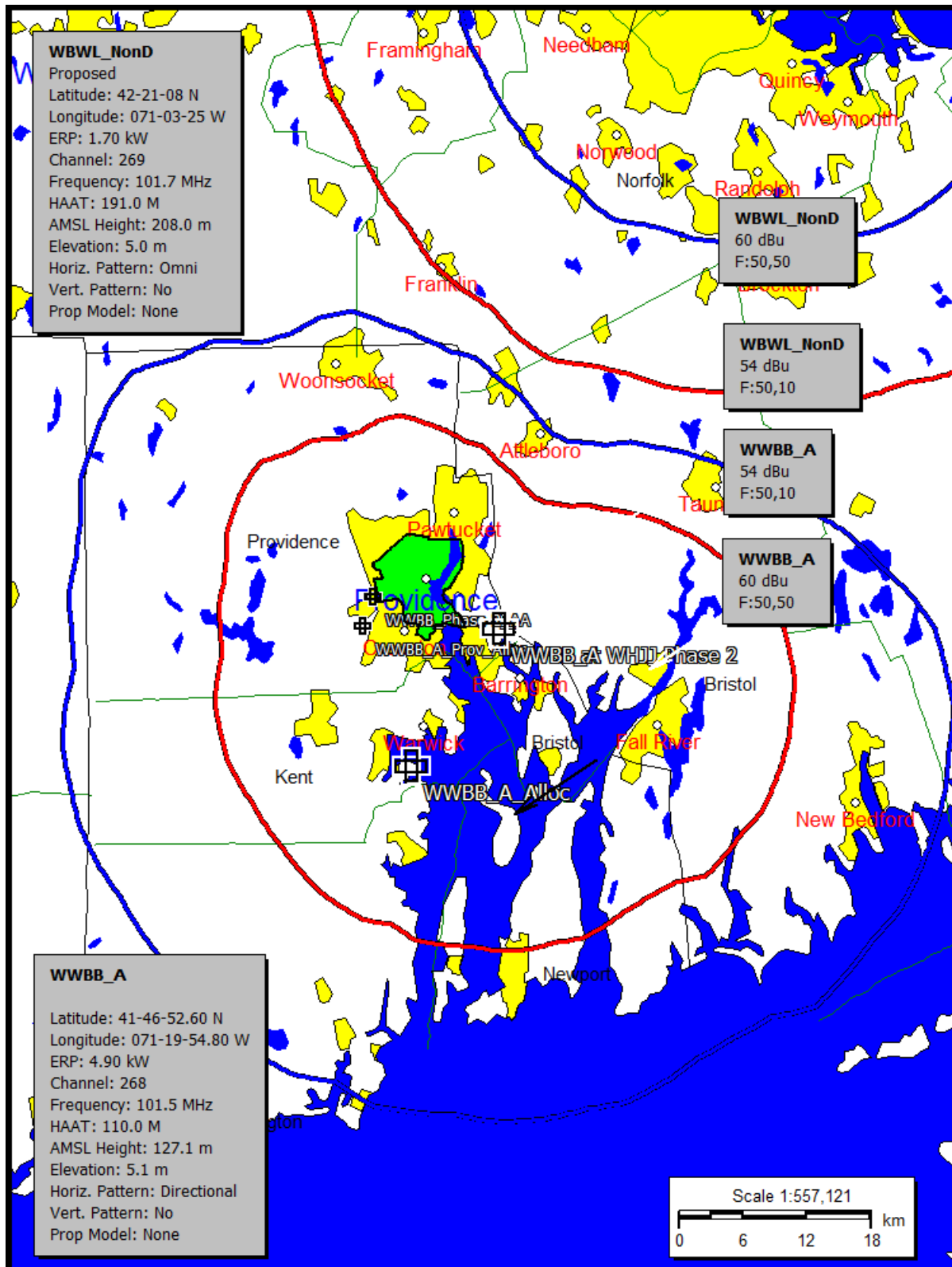
The two-element one-half wavelength spaced antenna for WBWL is mounted 6 meters above the center of radiation for the WHRB antenna. The WBWL antenna has a center of radiation at 20.5 meters above the roof. Using FMModel, the combined peak downward electromagnetic field power density would be 0.128 mW/cm<sup>2</sup> at two meters above roof level. This value takes into account a dismissed application filed by WERS to increase its ERP to 5.3 kW.

When necessary for tower workers to do maintenance on the masts, WBWL will reduce power or terminate transmissions in order that tower workers will not be exposed to radiofrequency electromagnetic fields in excess of FCC guideline levels.

**Figure 1. WBWL Antenna Location Spacing Study**

Fac_id	Callsign	Chanl	ERP_w	Licensee	ARN	Class	Status	Dist_km	Sep	Clr	Comments
40824	WBWL	269	1700	AMFM RADIO LICENSES, LLC	BLH-20060307AAE	A	LIC	0	115	-115	Current Facility
54568	WWBB	268	13500	CLEAR CHANNEL BROADCASTING LICENSES, INC.	BLH-19841227KZ	B	LIC	57.08	113	-55.9	Current Facility
2683	WCIB	270	50000	QANTUM OF CAPE COD LICENSE COMPANY, LLC	BLH-19911028KA	B	LIC	96.07	113	-16.9	Current Facility
2683	WCIB_B_Ant	270	13000	QANTUM OF CAPE COD LICENSE COMPANY, LLC	Proposed	B	APP	96.08	113	-16.9	Contingent Proposed Facility
54568	WWBB_A_Ant	268	4900	CLEAR CHANNEL BROADCASTING LICENSES, INC.	Proposed	A	APP	67.38	72	-4.6	Contingent Proposed Facility
68241	WBUR-FM	215	12000	THE TRUSTEES OF BOSTON UNIVERSITY	BLED-20050812AGN	B	LIC	14.65	15	-0.3	
156579	W271CG	271	10	HORIZON CHRISTIAN FELLOWSHIP	BMPFT-20140429AAB	D	CP MOD	11.71	0	11.7	

**Figure 2. Map of WBWL and WWBB Predicted Protected and Interfering Contours**



**Figure 3. Map of WBWL and WCIB Predicted Protected and Interfering Contours**

